

**Technical Documentation for the
2003 Palmetto Achievement Challenge Tests
Alternate Assessment of
English Language Arts, Mathematics,
Science, and Social Studies**



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INTRODUCTION

The South Carolina Palmetto Achievement Challenge Tests Alternate Assessment (PACT-Alt) is a state-level standards-based portfolio assessment specifically designed for students who are unable to participate in the Palmetto Achievement Challenge Tests (PACT). This document provides a brief history of the development of the PACT-Alt and describes its administration during the 2002–03 school year.

The PACT-Alt was developed in conformance with federal and state law. The 1997 amendments to the federal Individuals with Disabilities Education Act (IDEA '97) mandates that all children, including those with significant disabilities, be included in the state testing and accountability systems. The South Carolina Education Accountability Act (EAA) of 1998 provides for a performance-based accountability system that includes all students. The EAA supports South Carolina's commitment to public education and its conviction that high expectations for *all* students are vital components of the effort to improve academic performance. The South Carolina State Board of Education is directed, under the EAA, to adopt grade-specific performance-oriented educational standards in the core academic areas of English language arts (ELA), mathematics, science, and social studies.

Because the South Carolina Department of Education (SDE) had no prior experience with alternate assessments, a steering committee composed of stakeholders—special education teachers, school administrators, parents, representatives of state agencies such as the Department of Disabilities and Special Needs, and representatives from higher education—was formed. The committee was convened by the SDE's Office of Exceptional Children in May 1998, shortly after the regulations for IDEA '97 were published, to provide the SDE with recommendations regarding developing an assessment instrument to meet the federal mandate. The committee's primary purpose was to define the parameters of an alternate assessment that met federal requirements and that could be in place by July 1, 2000, for students who could not participate in the state's PACT assessments, even with accommodations and/or modifications.

The committee defined the parameters of the alternate assessment and recommended developing the document that came to be titled *Extensions and Adaptations of the South Carolina Curriculum Standards for Students Participating in Alternate Assessment* (SDE 1999). The curriculum standards and the principles for implementing alternate assessment adopted by the steering committee are the basis of the PACT-Alt. The committee affirmed that the PACT-Alt would be aligned with the South Carolina curriculum standards. The state standards provide the basis for alignment across the state education system for district and school curricula, classroom instruction, units of study, and learning experiences.

At the time that the committee first met, only one other state, Kentucky, had experience with alternate assessments for students with disabilities. Consequently, South Carolina, along with several other states, modeled its alternate assessment after Kentucky's alternate assessment, which was based on the use of portfolios. To guide the development of the PACT-Alt and to ensure that all students were included in the testing and accountability systems and would have appropriate access to instruction that is based on the South Carolina curriculum standards, the committee specified a number of principles and goals for the PACT-Alt.

PACT-Alt Principles

- All children can learn; they can be challenged with high standards and can be expected to meet them.
- Special education is an extension and an adaptation of the general education program and curriculum, rather than an alternate or separate system.
- The curriculum standards approved by the South Carolina State Board are the learning foundation for all students, including students with unique needs and abilities.
- Measurement and reporting must be defensible in terms of feasibility, validity, reliability, and comparability.
- Results of the state standards-based program must be used to improve planning, instruction, and learning.
- An alternate assessment is appropriate for the few students for whom the state assessment, even with accommodations and/or modifications, is not appropriate.
- The alternate assessment is designed for a diverse group of students and should be flexible enough to address their individual needs.

PACT-Alt Goals

- To provide evidence that students have acquired the skills and knowledge necessary to become as independent as possible
- To document the student's performance and the performance of the programs serving the student
- To incorporate best-practice instructional techniques into standards-based assessment activities
- To provide information to be used in the development of curricula that are responsive to the student's needs

After designing the guiding principles for the alternate assessment and outlining the type of assessment to be developed, the committee recommended that the SDE seek a testing contractor to develop an assessment that was responsive to the guiding principles and appropriate for the students who met the participation criteria set forth by the committee. On the basis of the input from the steering committee, the SDE developed a request for proposals from contractors to develop an alternate assessment.

Advanced Systems in Measurement and Evaluation, Inc. (ASME), was awarded the contract for the PACT-Alt in 1999. In April of 2000, the ASME changed its name to Measured Progress, Inc. (MP). The contractor was responsible for all aspects of the PACT-Alt development and administration; materials production, shipping, and processing; portfolio scoring; and results reporting. MP proceeded to develop the assessment for a year (1999–2000) and then

administered the ELA and mathematics alternate assessments in a statewide field test (2000–01). In 2001–02, the PACT-Alt ELA and mathematics assessments were administered statewide for the first time. MP will continue to serve as the contractor until the end of the 2003–04 school year.

Upon selection of a contractor, the steering committee was disbanded and replaced with the PACT-Alt advisory committee, which was convened in November 1999 by the SDE's Office of Assessment for the purpose of providing input to the contractor and the SDE throughout the development and implementation process. Initially the advisory committee met quarterly; it continues now to meet biannually to review the status of the process and to provide ongoing guidance. Some members of the original steering committee serve on the advisory committee; additional members were added to ensure representation from the group of teachers who are conducting the assessment.

Changes for the 2002–03 PACT-Alt administration include the following:

- The subjects areas assessed were expanded from ELA and mathematics to include science and social studies.
- The ratings for program supports dimensions were changed from levels 1, 2, 3, and 4 to levels 1, 2, and 3. After reviewing the 2001–02 scoring data, the PACT-Alt advisory committee recommended that the level 3 and 4 categories be combined into one level, which resulted in a total of three levels only. The change improved the score reliability indexes in 2002–03 compared with those from the previous year.
- The *Palmetto Achievement Challenge Tests Score Report User's Guide for Use with 2003 Score Reports* (SDE 2003) was published. The *User's Guide* contains vital information about the assessment: how the portfolios were scored, how the scores should be interpreted, and how the results should be used.

Chapters 1 and 2 of this document provide an overview of the administration and scoring of the alternate assessments for the 2002–03 school year. Chapter 3 addresses reliability and validity.

Chapter 1

TEST ADMINISTRATION

This chapter provides an overview of the PACT-Alt administration during the 2002–03 school year.

1.1 ADMINISTRATOR TRAINING

Teachers administering the PACT-Alt were trained in ten regional one-day sessions coordinated by the SDE and MP and conducted throughout the state on the following dates in 2002: August 21–23, August 28–30, September 10–11, and September 12–13. Attended by some four hundred teachers, the training sessions offered guidance in developing the portfolios and implementing standards-based instruction in the classroom. The teachers received the *South Carolina Palmetto Achievement Challenge Tests Alternate Assessment Portfolio Guide* (SDE 2002c), which describes in detail the procedures for test administration, provides examples of student work, and contains copies of all forms to be used and submitted with the portfolios. The training was also broadcast over the South Carolina Educational Television Network on August 21, 2002, for teachers who were unable to attend the regional sessions.

Regional one-day training sessions were also conducted on August 20, August 27, and September 9, 2002, to train PACT-Alt teacher leaders. Each school district nominated at least one teacher leader who would be available to help teachers with PACT-Alt administration issues. Follow-up regional half-day teacher training sessions were offered January 14–17 and February 4–7, 2003, to teachers who were administering the PACT-Alt.

District test coordinators (DTCs) were trained in a session coordinated by the SDE and MP in February 2003. During that session, MP and SDE staff provided training based on the contents of the *District Test Coordinator's Manual for PACT-Alt* (SDE 2002a), which includes detailed information about handling materials, testing, test security, and return procedures.

1.2 TIMELINE

Because the PACT-Alt is a portfolio-based assessment, its administration is a year-long process. From September 20, 2002, through April 18, 2003, teachers or observers tracked student progress on observable skills and recorded their observations on standardized data collection sheets. The assessment consisted of four data collection periods with each period corresponding to the end of a nine-week period in the school calendar. The dual purpose for timing the data collection with the nine-week periods is that the portfolio's contents can be used to inform instruction and to meet individualized education program (IEP) reporting requirements. Consequently, the portfolio is used not only as a summative but also as a formative assessment.

1.3 MATERIALS HANDLING

All PACT-Alt administration materials were shipped from MP to the DTCs. Materials were then distributed to schools from the district offices. Materials provided for the PACT-Alt administration included ring binders for holding the students' portfolios. In early August 2002, PACT-Alt DTCs were asked to specify the number of binders their district needed. The portfolio binders were shipped to the districts in early September. Also shipped to the DTCs were copies of the *District Test Coordinator's Manual for PACT-Alt* (SDE 2002a) and the *South Carolina Palmetto Achievement Challenge Tests Alternate Assessment Portfolio Guide* (2002c). At the end of March 2003, DTCs received a shipment from MP that contained scoring packets, bar-coded labels, instructions for affixing the labels, envelopes for schools to use to return the completed portfolios, and directions for returning the portfolios. Each scoring packet contained five machine-scannable sheets—one for demographic information and four for scores. A bar-coded label was to be affixed to each of the machine-scannable sheets and to audiocassettes and videotapes, if any, that were submitted as part of the portfolio.

1.4 TEST SECURITY

The PACT-Alt is a component of the South Carolina state assessment system and is subject to the provisions of state test security legislation (S.C. Code Ann. § 59-1-445). Any breach of test security must be reported to the State Law Enforcement Division (SLED) in accordance with the test security legislation and State Board of Education regulations. However, the portfolio nature of the PACT-Alt makes it different from the PACT, which consists of items with a traditional format.

The contents of a student's PACT-Alt portfolio are determined and collected by an instructional team and reviewed by his or her parents and a school administrator. The items on which the student is being assessed are selected by the instructional team. Unlike the PACT, which contains items that can be reused in future test administrations and are standardized across students or are the same for all students in a grade and a subject, the items in the PACT-Alt are student-specific.

PACT-Alt assessment materials are confidential and must be maintained in a secure location. Copying the portfolio contents for the purpose of IEP planning is permissible. The copy is to be maintained in the student's IEP file and may be shared with his or her parents and other members of the IEP team in accordance with federal and state confidentiality regulations. However, interfering with student responses or data is a violation of the security legislation. The portfolio contents must reflect authentic student work and progress.

1.5 STUDENT PARTICIPATION

The decision for a student to participate in the PACT-Alt is made by the student's IEP team and is documented in the IEP. To document that the PACT-Alt is appropriate for an individual student, the IEP team reviews all important information about the student over multiple school years and in multiple instructional settings (e.g., school, home, community) and determines that the student meet *all* of the following criteria:

- demonstrates cognitive ability and adaptive skills that prevent his or her being assessed on the basis of the state curriculum standards, even with accommodations and modifications;
- has current adaptive skills requiring extensive direct instruction in multiple settings to accomplish the application and transfer of skills necessary for functional application in school, work, home, and community environments;
- is unable to apply or use academic skills in natural settings without direct instruction in those settings; and
- is unable to be assessed on the basis of the state curriculum standards *not* as the result of excessive or extended absences or social, cultural, or economic differences.

If the student met the PACT-Alt participation criteria, the age criterion was then applied: in order to participate in the 2002–03 PACT-Alt, students had to be ages eight through thirteen as of September 1, 2002. If a student did not meet the age criterion, he or she was not required to take the PACT or the PACT-Alt.

Chapter 2

SCORING

This chapter describes the contents of the student portfolio and explains how they were reviewed to produce the final ratings for the students.

2.1 PORTFOLIO CONTENTS

A completed portfolio must contain the following components:

- portfolio validation form,
- four content-area entries based on the South Carolina curriculum standards,
- evidence of student progress within standards-based instruction, and
- evidence of program supports.

Portfolio Validation Form

The portfolio validation form is used to verify that the contents of the portfolio reflect the student's daily instruction and include authentic student assessment. The form must be signed by the teacher and the school principal or a designated district representative. The student's parent or guardian should also sign the validation form to verify that he or she has reviewed the portfolio contents and that it reflects the child's daily instruction. If the parent does not sign the validation form, the teacher should document all attempts made to obtain the parent's or guardian's signature and should maintain the documentation in the student's file, *not* in the portfolio.

Four Content-Area Entries

The portfolio must include an entry for each of these four content areas: English language arts, mathematics, science, and social studies.

- **English language arts (ELA).** The ELA entry must contain evidence of student progress in literacy skills. The term *literacy* includes the ability to decode meaning from words, pictures, symbols, objects, and cues and is aligned with all of the strands of the ELA curriculum standards.
- **Mathematics.** The mathematics entry must contain evidence of student progress in standards-based activities in any or all of the strands in mathematics.
- **Science.** The science entry must contain evidence of student progress in standards-based activities using process skills and inquiry within the context of any of the science strands. The process skills include observation, classification, measurement, and communication. The term *inquiry* refers to the planning and conducting of a simple investigation.

- **Social studies.** The social studies entry must contain evidence of student progress in standards-based instruction in any of the strands within the social studies standards.

Portfolio Entry Components

Each portfolio entry must contain the following components:

- an entry cover sheet,
- evidence of student progress on the IEP objective or functional targeted skill,
- evidence of instruction within the context of standards-based activities,
- evidence of opportunities for student self-determination (i.e., choice making) that impacts learning within the context of standards-based activities, and
- evidence that instruction occurs in multiple settings.

2.2 STANDARD SETTING AND POLICY DEFINITIONS

A committee that included representatives of various constituencies—special education teachers who were experienced in administering the PACT-Alt, the Council of Exceptional Children (CEC), special education directors, district test coordinators, parent organizations, the South Carolina Association of School Psychologists, the Council of Administrators of Special Education (CASE), and the PACT-Alt advisory committee—met on May 16, 2002, to determine how standards would be set for the PACT-Alt.

Inherent in any standard-setting process is a policy definition of each achievement level. Policy definitions serve as guidelines for judges to follow in making decisions about the cutoff scores and are typically presented to the judges before the standard setting takes place. The following are the policy definitions for the four performance levels of the PACT-Alt ELA and mathematics assessments:

- **Below basic.** A student who performs at the “below basic” level on the PACT-Alt has not met expectations for student performance based on the South Carolina curriculum standards.
- **Basic.** A student who performs at the “basic” level on the PACT-Alt has met minimum expectations on the South Carolina curriculum standards.
- **Proficient.** A student who performs at the “proficient” level on the PACT-Alt has met expectations on the South Carolina curriculum standards.
- **Advanced.** A student who performs at the “advanced” level on the PACT-Alt has exceeded expectations on the South Carolina curriculum standards.

After reviewing the options for standard setting, the committee made the following recommendations:

- The student progress rating should be the student’s achievement-level score (see above); therefore, it was not necessary to set cutoff scores as the rubric defined the performance levels.

- The three program-supports dimension ratings should each be reported separately from the student progress rating and should be provided as information on the individual student report. These three ratings are intended to evaluate and to provide feedback on whether the student's instructional program was providing him or her with program supports in the three dimensions.

Score reports indicate levels of student progress as below basic, basic, proficient, or advanced. Final program-supports ratings are indicated numerically as 1, 1.5, 2, 2.5, and 3. Scorers can provide ratings of 1, 2, and 3 only; these ratings correspond to the descriptions in the scoring guide in table 2.1. The decimal numbers that end with .5 are a result of averaging disparate ratings. (See section 2.3 about the scoring process for details.)

A benchmark committee composed of teachers, administrators, and higher education representatives met in May 2003, to identify exemplars for scoring and training. They scored approximately one hundred randomly selected portfolios and identified portfolio entries that represented each performance level in ELA, mathematics, science, and social studies. The scoring guide (see table 2.1) was used to identify examples for scoring training sets and in the scoring process. The exemplar portfolios were compiled into a training manual for the scorers to use in scoring portfolios. The committee also provided recommendations for improvement in portfolio requirements and teacher training.

2.3 SCORING PROCESS

Thirty-five trained special education teachers and administrators from the Louisville, Kentucky, area scored approximately 1,500 portfolios from June 2–30, 2003, at the Louisville scoring center. Twenty of the scorers had participated in the 2001–02 PACT-Alt scoring. All scorers were trained to use the revised scoring guide shown in table 2.1, below. The same guide is used for scoring all subject-matter entries. Each portfolio required at least thirty minutes to score. All scorers worked independently from the other scorers. However, if they had questions regarding their task, they could consult with one of the trainers.

The SDE sent two staff members to the Louisville, Kentucky, scoring center to observe the hand-scoring process.

TABLE 2.1
PACT-Alt Scoring Guide 2002–03

		Score		
Part 1: Student Performance				
Scoring Dimension	Below Basic	Basic	Proficient	Advanced
Student Progress within Standards-Based Activities	Data recorded in all 4 periods.	Data recorded in all 4 periods.	Data recorded in all 4 periods.	Data recorded in all 4 periods.
	Progress on functional targeted skill not evidenced.	Progress on functional targeted skill evidenced in the 2nd, 3rd, and 4th periods.	Progress on functional targeted skill evidenced in the 2nd, 3rd, and 4th periods.	Progress on functional targeted skill evidenced in the 2nd, 3rd, and 4th periods.
	Increased complexity not present or clear.	Increased complexity not present or clear.	Increased complexity evidenced in 2 of the last 3 periods (2nd, 3rd, 4th periods).	Increased complexity evidenced in the 2nd, 3rd, and 4th periods.
Part 2: Ratings for Program Supports				
Scoring Dimensions	1	2	3	
Standards-Based Activities	There is little or no evidence of opportunity for the student to perform the functional targeted skill within the context of age appropriate standards-based activities.	There is evidence of opportunity for the student to perform the functional targeted skill within the context of age appropriate standards-based activities.	There is evidence of opportunity for the student to perform the functional targeted skill within the context of a variety of age appropriate standards-based activities.	
Opportunity for Student Self-Determination within Standards-Based Activities	There is little or no evidence of opportunity for the student to make choices.	There is evidence of opportunity for the student to make choices that impact student learning.	There is evidence of consistent opportunity for the student to make choices that impact student learning.	
Opportunity for Standards-Based Instruction within Multiple Settings	There is no evidence that the student receives instruction and has the opportunity to perform the functional targeted skill in settings other than specialized environments.	There is evidence that the student receives instruction and has the opportunity to perform the functional targeted skill in a variety of settings.	There is evidence that the student receives instruction and has the opportunity to perform the functional targeted skill in a variety of settings of which at least one must be with non-disabled peers or in the community.	

Note: This scoring guide was used to score the required ELA and mathematics entries. Detailed descriptions of the scoring-guide terms can be found in the *Scoring Handbook for PACT-Alt* (2002b).

Rating for Student Progress

The final score in student progress for each subject requires an exact agreement between two scorers. Up to four scores are given in order for this exact agreement to be reached.

- If the first two scores are identical, then that is the reported score.
- If the first two scores are not the same, a third scorer scores the portfolio.
- If the third score is identical to one of the first two scores, then that is the reported score. Otherwise a fourth scorer scores the portfolio.
- If the fourth score is identical to one of the first three scores, then that is the reported score. Otherwise, all four scorers gave the student a different score. When all scores are different, the reported score is arrived at through a resolution committee consisting of trainers.

Table 2.2, below, gives three examples. The first example shows an exact match between the first and second scores, both of which are *below basic* (BB). Therefore, the final score is also *below basic*. In the second example, the first score is *basic* (B), and the second score is *below basic*. Because of the difference, a third score is obtained, *basic*. Since the first and the third scores match, the final score is *basic*. The third example has different first and second scores: *advanced* (A) and *basic* (B). A third score is therefore obtained, *proficient* (P), which does not match the first two. Consequently, a fourth score is obtained, *proficient*, which finally matches one of the first three scores, specifically the third score. Hence, the final score is *proficient*.

TABLE 2.2
Examples of Student Progress Ratings

Example Number	First Score	Second Score	Third Score	Fourth Score	FINAL Score
1	BB	BB	---	---	BB
2	B	BB	B	---	B
3	A	B	P	P	P

Legend: BB = below basic, B = basic, P = proficient, A = advanced

Ratings for Program Supports

Part 2 of the scoring guide, “Ratings for Program Supports,” evaluates effective practice. There are three scoring dimensions within this part:

- *Standards* addresses the opportunity that the program affords the student to receive instruction in standards-based activities.
- *Opportunity for student self-evaluation* addresses the opportunity the program affords the student to plan, monitor, evaluate, and use his or her evaluation to improve or focus on improvement.
- *Multiple-setting instruction* addresses the opportunity the program provides for the student to receive instruction in multiple settings.

Each dimension is scored numerically as 1, 2, 3, or 4. Unlike student progress, program supports can be scored using identical or adjacent scores. Scoring adjacently allows for scores to be off by 1 point. If the first two scores are off by more than 1 point, a third score is required and the third score becomes the reported score.

- If the first two scores are identical, then that is the reported score. If the first two scores are adjacent (off by 1 point), their average is the reported score.
- If the first two scores are neither identical nor adjacent, a third scorer scores the dimension. The third score is the reported score.

The same rules are used for each of the three program-supports dimensions. Table 2.3, below, provides three examples. In the first example, the first score and second scores are 1; therefore the final score is 1.0. In the second example, the first score is 2 and the second score is 3. These are adjacent scores; therefore the final score is 2.5. In the third example, the first score is 1 and the second score is 3. These are not adjacent scores; therefore, the third score of 2 is final and serves as the reported score.

TABLE 2.3
Examples of Program-Supports Scores

Example Number	Dimension	First Score	Second Score	Third Score	FINAL Score
1	Standards	1	1	---	1.0
2	Opportunity for Student Self-Evaluation	2	3	---	2.5
3	Multiple-Setting Instruction	1	3	2	2.0

2.4 QUALITY CONTROL

Quality-control processes were used to ensure that all portfolios and score sheets could be accounted for at all times. Portfolios and score sheets were carefully inspected, tracked, monitored, and inventoried several times a day.

Detailed records of all scores given by each scorer were kept. The measure of scorer reliability used was the percentage of students who received exactly the same score or adjacent scores from the two scorers. These indexes, which were computed on a daily basis, served as the quality-control mechanism for monitoring the scorers' daily performance. Scorers who fell below the scorer reliability threshold of 75 percent for student progress and 90 percent for program-support dimensions were retrained.

As scoring progressed, the overall scorer reliability was computed using all of the data from the first day through the end of the current day. These cumulative reliabilities were used to show which areas of the scoring guide were causing the most difficulty (i.e., where disagreement is occurring most often) and which scorers were most frequently in disagreement with other scorers. This daily record was submitted electronically to the SDE at the close of each scoring day. MP scoring staff in collaboration with the SDE reviewed this record daily and gave general training reminders and identified scorers in need of retraining.

2.5 PERCENTAGE OF STUDENTS AT EACH PERFORMANCE LEVEL

Table 2.4, below, provides the distribution of the students in the four achievement levels for each grade in ELA, mathematics, science, and social studies.

TABLE 2.4
Student Progress: Percentage of Students at Each Overall Performance Level

	N	Below Basic	Basic	Proficient	Advanced
ELA					
Grade 3	302	49.3%	16.9%	6.0%	27.8%
Grade 4	233	41.6%	23.6%	7.7%	27.0%
Grade 5	352	45.7%	17.6%	13.9%	22.7%
Grade 6	227	48.0%	16.3%	12.8%	22.9%
Grade 7	202	52.5%	16.3%	9.9%	21.3%
Grade 8	133	48.9%	17.3%	8.3%	25.6%
Grades 3–8	1,449	47.4%	18.0%	10.0%	24.6%
Mathematics					
Grade 3	285	46.7%	14.4%	10.9%	28.1%
Grade 4	227	41.9%	22.9%	12.8%	22.5%
Grade 5	335	41.5%	20.0%	11.3%	27.2%
Grade 6	220	51.4%	20.0%	9.1%	19.5%
Grade 7	195	52.8%	17.4%	12.3%	17.4%
Grade 8	127	44.9%	21.3%	7.1%	26.8%
Grades 3–8	1,389	46.1%	19.1%	10.9%	24.0%
Science					
Grade 3	288	52.8%	17.0%	8.3%	21.9%
Grade 4	215	43.7%	23.3%	7.9%	25.1%
Grade 5	323	51.4%	18.3%	10.5%	19.8%
Grade 6	216	55.1%	21.8%	5.6%	17.6%
Grade 7	192	51.0%	19.3%	14.6%	15.1%
Grade 8	128	60.2%	17.2%	8.6%	14.1%
Grades 3–8	1,362	51.8%	19.4%	9.3%	19.5%
Social Studies					
Grade 3	283	53.4%	15.2%	5.7%	25.8%
Grade 4	217	43.8%	20.3%	7.8%	28.1%
Grade 5	321	44.5%	23.1%	5.6%	26.8%
Grade 6	210	49.5%	18.1%	8.6%	23.8%
Grade 7	184	45.1%	23.4%	9.8%	21.7%
Grade 8	122	45.9%	22.1%	7.4%	24.6%
Grades 3–8	1,337	47.3%	20.1%	7.2%	25.4%

Source: Measured Progress, Inc.

Tables 2.5, 2.6, 2.7, and 2.8, below, provide the distribution of the students in the program-supports dimensions for each grade in ELA, mathematics, science, and social studies respectively.

TABLE 2.5

ELA Program Supports: Percentage of Students in Each Score Category

	N	Score Category				
		1.0	1.5	2.0	2.5	3.0
Standards Dimension						
Grade 3	302	62.9%	11.9%	12.3%	6.3%	6.6%
Grade 4	233	65.7%	8.6%	11.6%	6.0%	8.2%
Grade 5	352	54.3%	8.2%	20.7%	8.0%	8.8%
Grade 6	227	67.0%	10.6%	13.7%	6.6%	2.2%
Grade 7	202	62.4%	9.4%	7.4%	11.9%	8.9%
Grade 8	133	66.9%	8.3%	11.3%	6.0%	7.5%
Grades 3–8	1,449	62.2%	9.6%	13.7%	7.5%	7.1%
Opportunity for Student Self-Evaluation Dimension						
Grade 3	302	69.2%	5.0%	5.0%	7.0%	13.9%
Grade 4	233	69.1%	6.9%	3.9%	6.0%	14.2%
Grade 5	352	61.6%	5.7%	6.0%	6.5%	20.2%
Grade 6	227	74.9%	6.2%	5.7%	4.8%	8.4%
Grade 7	202	63.9%	8.4%	3.0%	6.4%	18.3%
Grade 8	133	72.9%	7.5%	3.8%	3.0%	12.8%
Grades 3–8	1,449	67.8%	6.3%	4.8%	5.9%	15.1%
Multiple-Setting Instruction Dimension						
Grade 3	302	66.6%	9.6%	4.0%	4.6%	15.2%
Grade 4	233	66.5%	9.4%	4.3%	3.4%	16.3%
Grade 5	352	58.8%	8.8%	6.5%	7.7%	18.2%
Grade 6	227	72.7%	1.8%	4.0%	4.0%	17.6%
Grade 7	202	67.3%	3.0%	3.0%	4.5%	22.3%
Grade 8	133	70.7%	3.8%	4.5%	3.8%	17.3%
Grades 3–8	1,449	66.1%	6.7%	4.6%	5.0%	17.7%

Source: Measured Progress, Inc.

TABLE 2.6

Mathematics Program Supports: Percentage of Students in Each Score Category

	N	Score Category				
		1.0	1.5	2.0	2.5	3.0
Standards Dimension						
Grade 3	285	62.1%	11.6%	12.6%	7.4%	6.3%
Grade 4	227	65.2%	11.5%	9.3%	7.0%	7.0%
Grade 5	335	52.5%	9.9%	16.1%	11.3%	10.1%
Grade 6	220	64.1%	10.0%	15.0%	6.4%	4.5%
Grade 7	195	58.5%	11.3%	15.4%	5.6%	9.2%
Grade 8	127	66.9%	12.6%	7.9%	6.3%	6.3%
Grades 3–8	1,389	60.5%	10.9%	13.2%	7.8%	7.5%
Opportunity for Student Self-Evaluation Dimension						
Grade 3	285	69.1%	6.3%	3.2%	6.0%	15.4%
Grade 4	227	73.1%	7.0%	2.2%	5.7%	11.9%
Grade 5	335	58.2%	7.2%	6.3%	7.2%	21.2%
Grade 6	220	71.8%	7.7%	5.9%	5.5%	9.1%
Grade 7	195	65.6%	7.2%	4.6%	8.2%	14.4%
Grade 8	127	74.8%	11.0%	1.6%	1.6%	11.0%
Grades 3–8	1,389	67.6%	7.4%	4.2%	6.0%	14.7%
Multiple-Setting Instruction Dimension						
Grade 3	285	63.9%	9.5%	5.3%	2.8%	18.6%
Grade 4	227	67.4%	9.7%	1.3%	5.3%	16.3%
Grade 5	335	60.6%	8.4%	6.3%	6.6%	18.2%
Grade 6	220	66.4%	5.0%	6.4%	4.1%	18.2%
Grade 7	195	68.2%	4.6%	5.6%	1.5%	20.0%
Grade 8	127	64.6%	8.7%	3.1%	1.6%	22.0%
Grades 3–8	1,389	64.7%	7.8%	4.9%	4.0%	18.6%

Source: Measured Progress, Inc.

TABLE 2.7

Science Program Supports: Percentage of Students in Each Score Category

	N	Score Category				
		1.0	1.5	2.0	2.5	3.0
Standards Dimension						
Grade 3	288	63.5%	9.0%	13.5%	7.3%	6.6%
Grade 4	215	64.7%	8.8%	13.0%	8.4%	5.1%
Grade 5	323	52.0%	11.5%	17.0%	10.5%	9.0%
Grade 6	216	62.5%	12.0%	14.4%	6.9%	4.2%
Grade 7	192	63.0%	8.3%	13.5%	7.8%	7.3%
Grade 8	128	71.1%	10.2%	9.4%	3.9%	5.5%
Grades 3–8	1,362	61.5%	10.1%	14.0%	7.9%	6.5%
Opportunity for Student Self-Evaluation Dimension						
Grade 3	288	69.4%	6.3%	3.8%	5.2%	15.3%
Grade 4	215	71.2%	7.9%	3.3%	5.1%	12.6%
Grade 5	323	61.0%	8.4%	4.6%	6.2%	19.8%
Grade 6	216	72.2%	8.3%	4.2%	6.5%	8.8%
Grade 7	192	68.8%	8.3%	3.6%	5.7%	13.5%
Grade 8	128	78.9%	8.6%	3.1%	1.6%	7.8%
Grades 3–8	1,362	68.9%	7.9%	3.9%	5.4%	14.0%
Multiple-Setting Instruction Dimension						
Grade 3	288	74.3%	8.7%	4.9%	3.5%	8.7%
Grade 4	215	71.6%	9.3%	4.2%	4.2%	10.7%
Grade 5	323	67.8%	9.0%	8.4%	4.3%	10.5%
Grade 6	216	72.7%	7.4%	3.7%	2.3%	13.9%
Grade 7	192	70.8%	6.8%	5.2%	1.6%	15.6%
Grade 8	128	73.4%	10.2%	1.6%	2.3%	12.5%
Grades 3–8	1,362	71.5%	8.5%	5.1%	3.2%	11.6%

Source: Measured Progress, Inc.

TABLE 2.8

Social Studies Program Supports: Percentage of Students in Each Score Category

	N	Score Category				
		1.0	1.5	2.0	2.5	3.0
Standards Dimension						
Grade 3	283	64.7%	11.3%	13.1%	5.7%	5.3%
Grade 4	217	68.2%	11.5%	9.7%	6.0%	4.6%
Grade 5	321	55.1%	13.1%	15.9%	9.0%	6.9%
Grade 6	210	66.2%	14.8%	8.6%	6.2%	4.3%
Grade 7	184	64.7%	7.1%	14.1%	7.6%	6.5%
Grade 8	122	72.1%	10.7%	6.6%	2.5%	8.2%
Grades 3–8	1,337	63.9%	11.7%	12.0%	6.6%	5.8%
Opportunity for Student Self-Evaluation Dimension						
Grade 3	283	73.1%	6.7%	4.2%	5.3%	10.6%
Grade 4	217	74.2%	7.4%	3.7%	4.1%	10.6%
Grade 5	321	64.2%	6.5%	5.0%	7.2%	17.1%
Grade 6	210	74.8%	9.0%	3.8%	5.2%	7.1%
Grade 7	184	69.6%	4.9%	3.3%	6.0%	16.3%
Grade 8	122	76.2%	9.8%	0.8%	3.3%	9.8%
Grades 3–8	1,337	71.2%	7.2%	3.8%	5.5%	12.3%
Multiple-Setting Instruction Dimension						
Grade 3	283	58.0%	13.8%	6.7%	9.2%	12.4%
Grade 4	217	59.9%	12.0%	4.6%	5.5%	18.0%
Grade 5	321	52.0%	11.2%	11.2%	8.1%	17.4%
Grade 6	210	63.3%	7.6%	6.2%	4.8%	18.1%
Grade 7	184	66.8%	6.5%	4.9%	5.4%	16.3%
Grade 8	122	63.1%	13.1%	5.7%	3.3%	14.8%
Grades 3–8	1,337	59.4%	10.8%	7.0%	6.6%	16.2%

Source: Measured Progress, Inc.

Chapter 3

RELIABILITY AND VALIDITY

3.1 RELIABILITY

Due to the nature of the scoring process, no internal consistency reliability measures are available for the data. The measure of reliability used is the exact agreement index—the percentage of students who received exactly the same score from the two initial scorers. Over all grade levels, the first and second scorers reached an exact agreement index of 79.9 percent in ELA student progress, 79.8 in mathematics student progress, 81.4 in science progress, and 78.8 in social studies student progress. In table 3.1, below, these agreement indexes are the sum of the entries prior to rounding along the diagonal within each subject. The table shows agreement data between the two initial scorers in ELA, mathematics, science, and social studies.

TABLE 3.1
Student Progress: Interrater Agreement Indexes

ELA (N=1,449 for grades 3–8)					
		RATINGS BY SCORER 2			
		Below Basic	Basic	Proficient	Advanced
RATINGS BY SCORER 1	Below Basic	40.6%	2.8%	0.8%	1.4%
	Basic	2.5%	13.7%	1.6%	1.2%
	Proficient	1.1%	1.4%	5.8%	2.6%
	Advanced	1.6%	1.5%	1.6%	19.7%
Mathematics (N=1,389 for grades 3–8)					
		RATINGS BY SCORER 2			
		Below Basic	Basic	Proficient	Advanced
RATINGS BY SCORER 1	Below Basic	39.5%	2.7%	0.8%	1.4%
	Basic	2.5%	14.3%	1.7%	1.1%
	Proficient	1.4%	1.9%	6.0%	1.9%
	Advanced	1.3%	1.6%	1.9%	20.0%
Science (N=1,362 for grades 3–8)					
		RATINGS BY SCORER 2			
		Below Basic	Basic	Proficient	Advanced
RATINGS BY SCORER 1	Below Basic	46.5%	2.6%	1.0%	1.3%
	Basic	1.8%	13.7%	1.9%	1.7%
	Proficient	1.5%	1.8%	5.2%	1.3%
	Advanced	0.9%	1.5%	1.5%	15.9%
Social Studies (N=1,337 for grades 3–8)					
		RATINGS BY SCORER 2			
		Below Basic	Basic	Proficient	Advanced
RATINGS BY SCORER 1	Below Basic	41.2%	1.6%	1.7%	1.5%
	Basic	2.5%	14.4%	2.1%	2.5%
	Proficient	0.7%	1.7%	3.5%	2.1%
	Advanced	1.5%	1.6%	1.6%	19.7%

Source: Measured Progress, Inc.

Table 3.2, below, shows the percentages for exact agreement and adjacent agreement (scores differing by 1 point) for ELA, mathematics, science, and social studies.

TABLE 3.2
Exact and Adjacent Agreement Indexes

Dimension	Exact Agreement Index	Adjacent Agreement Index	Sum of the Exact and Adjacent Agreement Indexes
ELA (N=1,449 for grades 3–8)			
Student Progress	79.9%	12.4%	92.3%
Standards	81.9%	17.0%	99.0%
Opportunity for Student Self-Evaluation	82.6%	12.3%	94.9%
Multiple-Setting Instruction	82.8%	11.7%	94.5%
Mathematics (N=1,389 for grades 3–8)			
Student Progress	79.8%	12.7%	92.4%
Standards	80.3%	18.7%	99.1%
Opportunity for Student Self-Evaluation	81.6%	13.5%	95.1%
Multiple-Setting Instruction	81.6%	11.8%	93.4%
Science (N=1,362 for grades 3–8)			
Student Progress	81.4%	10.8%	92.1%
Standards	80.5%	18.0%	98.5%
Opportunity for Student Self-Evaluation	82.2%	13.2%	95.4%
Multiple-Setting Instruction	82.9%	11.7%	94.6%
Social Studies (N=1,337 for grades 3–8)			
Student Progress	78.8%	11.6%	90.4%
Standards	79.9%	18.2%	98.1%
Opportunity for Student Self-Evaluation	82.0%	12.6%	94.7%
Multiple-Setting Instruction	75.8%	17.4%	93.2%

Source: Measured Progress, Inc.

It is important to note that tables 3.1 and 3.2, above, provide interrater agreement indexes for the first two scorers only. Whenever the first two scorers did not arrive at the same or adjacent scores for the same student, score resolution methods described in section 2.3 were used to determine the student's final score.

3.2 VALIDITY

The PACT-Alt has two main purposes. First, it assesses student performance within the curriculum domains. The portfolio provides information that the IEP team can use to plan appropriate instruction. Second, the PACT-Alt was designed for use as part of an overall, uniform accountability system focused on program, rather than student, accountability. It is these two purposes against which validity should be assessed.

Content Validity

Content validity addresses the issue as to whether a particular measure or assessment procedure includes all the relevant content that the measure is supposed to represent and does not include irrelevant or contradictory content. The dual purposes of the PACT-Alt are expressed in the content of the portfolio and in the portfolio scoring system. These, in turn, derive from two sources.

First, the content derives directly from the *Extensions and Adaptations of the South Carolina Curriculum Standards for Students Participating in Alternate Assessment* (SDE 1999). The portfolio and its evidentiary materials are organized around the three program-supports dimensions. These are the curriculum areas that were defined by the literature, by parents, and by teachers as being important content for students who meet the eligibility requirements for the PACT-Alt.

Second, the three program-supports dimensions derive from the special education literature and MP's twenty-five years of experience with the IDEA. These sources have provided guidance and support for best practices in special education.

Correlations among Domains

Table 3.3, below, reports the correlations among the domains in grades three through eight. Although the student progress ratings are expressed in terms of the ordinal categories "below basic," "basic," "proficient," and "advanced," weights of 0, 1, 2, and 3 respectively were assigned to the student progress ratings so that the correlations between student progress and the program-supports dimension scores could be computed.

TABLE 3.3
Between-Dimension Correlations

ELA (N=1,449 for grades 3–8)				
Dimension	Student Progress	Standards	Opportunity for Student Self-Evaluation	Multiple-Setting Instruction
Student Progress	1.00000	0.14862	0.13348	0.15744
Standards	0.14862	1.00000	0.86711	0.56385
Opportunity for Student Self-Evaluation	0.13348	0.86711	1.00000	0.49681
Multiple-Setting Instruction	0.15744	0.56385	0.49681	1.00000
Mathematics (N=1,389 for grades 3–8)				
Dimension	Student Progress	Standards	Opportunity for Student Self-Evaluation	Multiple-Setting Instruction
Student Progress	1.00000	0.17548	0.17759	0.20401
Standards	0.17548	1.00000	0.84750	0.58698
Opportunity for Student Self-Evaluation	0.17759	0.84750	1.00000	0.51465
Multiple-Setting Instruction	0.20401	0.58698	0.51465	1.00000
Science (N=1,362 for grades 3–8)				
Dimension	Student Progress	Standards	Opportunity for Student Self-Evaluation	Multiple-Setting Instruction
Student Progress	1.00000	0.19182	0.16941	0.14903
Standards	0.19182	1.00000	0.82114	0.53144
Opportunity for Student Self-Evaluation	0.16941	0.82114	1.00000	0.53048
Multiple-Setting Instruction	0.14903	0.53144	0.53048	1.00000
Social Studies (N=1,337 for grades 3–8)				
Dimension	Student Progress	Standards	Opportunity for Student Self-Evaluation	Multiple-Setting Instruction
Student Progress	1.00000	0.11197	0.10638	0.16600
Standards	0.11197	1.00000	0.83868	0.53324
Opportunity for Student Self-Evaluation	0.10638	0.83868	1.00000	0.48770
Multiple-Setting Instruction	0.16600	0.53324	0.48770	1.00000

Source: Measured Progress, Inc.

3.3 SOUTH CAROLINA EDUCATION OVERSIGHT COMMITTEE REVIEW

The South Carolina Education Oversight Committee (EOC) has been mandated to review state assessment programs for their alignment with the state standards, level of difficulty, validity, and the ability to differentiate levels of achievement. The EOC is also required to make recommendations to the SDE for any needed changes. In June 2002, the EOC published a report (EOC 2002) that summarized three separate studies of the 2000–01 PACT-Alt field test.

These studies, which were conducted under the auspices of the EOC, consisted of the following:

- a review of the alignment between the PACT-Alt portfolio contents and the state’s curriculum standards, completed in October 2001 by committee of eleven special education administrators, teachers, assessment specialists, and the parents of children with severe disabilities;
- independent reviews of the PACT-Alt, carried out during October and November 2001 by two national experts, Dr. Sandy Thompson, research associate at the National Center on Educational Outcomes at the University of Minnesota, and Dr. Paula Burdette, technical assistance service coordinator for the Mid-South Regional Resource Center at the University of Kentucky; and
- a technical review of the 2000–01 PACT-Alt data by Dr. Edward Wolfe, of Michigan State University.

In the first study, the committee members were asked to review fifty-two portfolios randomly selected by MP and to identify the functional skills and standards assessed in these sample portfolios. The results showed that the PACT-Alt was aligned with the state’s curriculum standards.

In the second study, the two national experts were asked to address the following issues:

- the extent to which the PACT-Alt as an assessment fulfills the accountability requirements of the EAA;
- the extent to which the PACT-Alt reflects best practices in the assessment of students with severe disabilities; and
- the clarity and comprehensiveness of the design of the portfolio, the collection of evidence for the portfolio, and the scoring rubric and scoring guidelines.

Both reviewers came to favorable conclusions regarding the PACT-Alt. Burdette (2001) remarked that the PACT-Alt “appears to be a high quality alternate assessment system.” Thompson (2001) judged that overall, the PACT-Alt is “well aligned with standards with a comprehensive portfolio design.”

In the third study (Wolfe 2002), which involved a technical review of the data, the PACT-Alt was found to have an acceptably high reliability overall but relatively low interrater reliabilities. The latter is attributed to the fact that the 2000–01 field-test portfolios were scored by relatively inexperienced teachers. These interrater reliabilities were expected to improve—and did in fact improve—in 2001–02 as a result of professional scoring services arranged by MP. The PACT-Alt appears to have an appropriate difficulty level overall. No evidence was found to suggest that different demographic groups scored differently.

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